

ABSTRACT

There is provided a niobium alloy powder suitable for manufacturing solid electrolytic capacitors having small leakage currents and high capacitances, where the powder is obtained by enhancing the thermal stability of the niobium oxide coating film while improving the temperature dependence of the sintering behavior of the powder. The niobium alloy powder includes one or more of molybdenum, chromium, and tungsten each with a content of 0.002 to 20% by mass, and phosphorus and boron each with a content of 0.002 to 5% by mass, and moreover, includes hydrogen with a content of 0.005 to 0.10% by mass, the balance being substantially niobium; the specific surface area of the powder is from 1 to 20 m²/g; the powder has a cumulative pore volume of 0.2 ml/g or more; and the cumulative volume of the pores each having a diameter of 1 μm or less makes up 10% or more and the cumulative volume of the pores each having a diameter of 10 μm or less makes up 40% or more in relation to the total cumulative pore volume.